

NATIONAL ACADEMIES

*Sciences
Engineering
Medicine*

COMMITTEE ON TOXICOLOGY 2022 Annual Meeting

SPEAKER BIOS (alphabetical by last name)

Bruce Alexander is Mayo Professor in Public Health and Head of the Division of Environmental Health Sciences in the School of Public Health at the University of Minnesota. He is an occupational and environmental epidemiologist with experience in environmental determinants of cancer, respiratory disease, injury prevention and control, One Health, the health of agricultural populations, global health, and public health capacity building. His research portfolio has included partnerships with scientists in academia, public health practice, private sector, governmental agencies, and non-governmental organizations. Dr. Alexander received his MS in environmental health from Colorado State University and his PhD in epidemiology from University of Washington.

Jeffrey Burgess is a Professor at the University of Arizona Zuckerman College of Public Health. He received his MD from the University of Washington School of Medicine in 1988, an MS in Toxicology with a Concentration in Industrial Hygiene from the University of Arizona in 1993 and an MPH in Environmental Health from the University of Washington in 1996. He previously worked as an Emergency Medicine physician, Medical Toxicologist and Occupational and Environmental Medicine physician. Dr. Burgess' translational occupational and environmental health research primarily focuses on evaluation and prevention of injurious occupational and environmental exposures, funded by grants from the Federal Emergency Management Agency (FEMA), the National Institute of Environmental Health Sciences (NIEHS), the Centers for Disease Control and Prevention (CDC) and the National Institute for Occupational Safety and Health (NIOSH).

Ian Cousins is a Professor based at the Department of Environmental Science at Stockholm University in Sweden. He is originally from the UK, but has been living in Sweden and working at Stockholm University for more than 20 years. He is well known for his research on the sources, transport and fate, and exposure pathways of PFAS. In recent years, Prof. Cousins has written a series of policy-related articles driven by his concern about the continued use of PFAS. He was first author of a recent article on grouping strategies for PFAS and also of another article suggesting that the extreme persistence of PFAS is of sufficient concern to regulate them as a class. Dr. Cousins received his Master's degree in Environmental Management at the University of Surrey and his PhD at Lancaster University.

Jamie DeWitt is a Professor in the Department of Pharmacology & Toxicology of the Brody School of Medicine at East Carolina University, where she has been since 2008. She started working with PFAS in 2005 during her postdoc at the U.S. Environmental Protection Agency (supported by UNC at Chapel Hill) and studies toxicological effects of their exposure on the immune system. Her current PFAS funding enables her to describe the immunotoxicity of understudied PFAS after adult or developmental exposures and to work on uncovering the molecular mechanisms by which they suppress antibody production. Dr. DeWitt also works to inform decision-makers about PFAS science to help them to develop strategies for managing PFAS as environmental pollutants. She received her PhD in Environmental Science & Neural Science from Indiana University-Bloomington.

David C. Dorman is a professor of toxicology in the Department of Molecular Biomedical Sciences at North Carolina State University. His research interests include neurotoxicology, nasal toxicology, pharmacokinetics, and cognition and olfaction in animals. He is an elected fellow of the Academy of Toxicological Sciences, a fellow of the American Association for the Advancement of Sciences, and a diplomate of the American Board of Veterinary Toxicology and the American Board of Toxicology. Dr. Dorman is a National Associate of the Academies and has chaired or served on multiple National Academies committees. He completed a combined PhD and veterinary toxicology residency program at the University of Illinois at Urbana-Champaign and holds a DVM from Colorado State University.

Michael Dzierlenga is a chemist whose recent work involves the pharmacokinetic modeling of slowly cleared chemicals, including PFAS and PCBs, and how pharmacokinetic variation interacts with associations between biomarker levels and disease. He received his PhD in Physical Chemistry from the University of Arizona in 2016. He went on to a postdoctoral fellowship at the EPA working under Dr. Paul Schlosser. After his postdoctoral fellowship he went on work briefly in consulting, where he had the opportunity to collaborate and learn from esteemed colleagues such as Drs. Mel Andersen, Harvey Clewell, Miyoung Yoon, and Matt Longnecker. Dr. Dzierlenga joined the EPA Office of Research and Development in 2021, where he works on dosimetric models to support the development of chemical risk assessments.

Gary Ginsberg is the director of the Center for Environmental Health, New York State Department of Health and is a Clinical Professor at the Yale School of Public Health. He has served on a range of USEPA and National Academy panels and has provided reviews for OSHA, Consumer Product Safety Commission and FDA. His risk assessments on fish contaminants, synthetic turf fields, house dust, and risks pertaining to vulnerable populations have been published in peer reviewed journals. He received his Ph.D. in Toxicology from the University of Connecticut in 1986.

Christina (Tina) Lawson is the Chief of the Field Research Branch at the National Institute for Occupational Safety and Health (NIOSH). Dr. Lawson began her career at NIOSH in 1998 as an epidemiologist and then served as an Epidemiology Team Leader before becoming branch chief in 2021. Her research background has focused on women's health and reproductive health and she has had productive collaborations with groups inside and outside of CDC, including the Nurses' Health Studies, the National Toxicology Program, and a multi-state collaboration with the National Birth Defects

Prevention Network. As Branch Chief, Dr. Lawson manages the Branch's etiologic and exposure assessment research portfolio on a wide variety of occupational topics. Examples of exposures, working conditions, and health outcomes studied by branch researchers include: PFAS, radiation, shift work, firefighting, healthcare workers, cancer, reproductive health, and health disparities. She received her PhD in Environmental Health Sciences from the University of Cincinnati College of Medicine.

Carla Ng is an assistant professor in the department of Civil and Environmental Engineering at the University of Pittsburgh. Her group focuses on in vitro and in silico approaches to understand biological exposure to legacy and emerging compounds. Dr. Ng received her MS in chemical engineering from the State University of New York at Buffalo and her PhD in chemical and biological engineering from Northwestern University.

Lisa Sweeney is a risk assessment toxicologist at UES, Inc., currently on assignment to the U.S. Air Force Research Laboratory's Airman Systems Directorate at Wright-Patterson Air Force Base, Ohio. Dr. Sweeney has a broad range of experience in the application of toxicology, chemistry, and engineering to problems in the health and environmental sciences. Her experience has focused on the development and refinement of physiologically-based pharmacokinetic (PBPK) models and their application to risk assessment and experimental design. Active areas of research for Dr. Sweeney currently include in vitro to in vivo extrapolation (IVIVE), new approach methodologies, and quantitative structure activity relationships. Other risk assessment experience includes preparing toxicological reviews and calculating human health risks from exposure to compounds found in manufacturing and maintenance environments in accordance with U.S. EPA guidance. She has also served as the principal investigator/project manager for in vivo acute toxicity and toxicokinetic studies.

She completed her undergraduate education in chemical engineering at Case Western Reserve University and a Ph.D. in chemical engineering with a minor in environmental toxicology at Cornell University. She has over 25 years of experience in risk assessment, pharmacokinetics, and biochemical engineering from private sector, non-profit and government perspectives. She is an author of over 50 peer-reviewed publications, with over 30 as first author. She is a diplomate of the American Board of Toxicology and is a Certified Hazardous Material Manager.

Thomas F. Webster is a Professor of Environmental Health at Boston University School of Public Health where he teaches environmental epidemiology and exposure modeling. His main research interests are 1) exposure and health effects of chemical exposures, with a particular current focus on PFAS, 2) the biological effects of mixtures, examined using toxicology, pharmacodynamic modeling and epidemiology. He is PI of two NIEHS grants examining mixtures: one on epidemiologic and statistical methods from the PRIME program, as well as a toxicology/modeling study employing new approach methods. He has previously been involved with a number of USEPA and National Academies committees. His group has recently published papers on PFAS mixtures and implications of different PFAS definitions. Dr. Webster received his DSc in environmental health from Boston University School of Public Health.

Todd Zurlinden is a computational biologist in the Office of Research and Development at EPA. He received his PhD in Chemical Engineering from Colorado State University in 2016 and completed a postdoctoral fellowship in the Center for Computational Toxicology and Exposure under the mentorship of Dr. Tom Knudsen. After completing his postdoctoral fellowship, he joined ORD's Quantitative Assessment Branch in 2019 where his primary research efforts focus on pharmacokinetic and physiologically-based pharmacokinetic model development for chemical risk assessment, including PFAS, with an emphasis on characterizing uncertainty in pharmacokinetic predictions.